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| 10/631,236 | 07/31/2003 | Julie Baker | 84595CPK | 1733 |

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EXAMINER

SCHWARTZ, PAMELA R

ART UNIT

PAPER NUMBER

1774

DATE MAILED: 08/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/631,236

Applicant(s)

BAKER ET AL.

Examiner

Pamela R. Schwartz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7 and 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7 and 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. Claims 1, 3-7 and 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeBoer et al. (6,299,302). The reference discloses an ink jet receiver sheet comprising a substrate and an ink receiving layer (col. 2, lines 42-44). The ink receiving layer will be porous because it contains clay and will be swellable because it contains one or more water-swallowable binders, such as polyvinyl alcohol or gelatin (see col. 3, lines 20-56). The layer includes a hardening agent (i.e. cross-linking agent)(see col. 4, lines 6-22) and a surfactant as instantly claimed (see col. 4, lines 23-30). A blowing agent may be present (see col. 4, lines 41-52). Proportions of surfactant are set forth in Table 1. The medium is formed by applying the coating mixture to the support and curing (see col. 6, lines 23-40). This curing at a raised temperature will inherently cause the blowing agent to decompose so that the layer will be foamed to some degree. Because the binder is a water-swallowable polymer, the ink receiving layers are "capable of absorbing dye within the polymer" as claimed. It is noted that applicants' use of "consisting essentially of" language does not preclude the presence of other ink absorptive layers.

The reference discloses supports of paper, polyester, etc. (see col. 3, lines 5-16). From this disclosure, it would have been obvious to one of ordinary skill in the art to form the support of polyethylene terephthalate because this is the most commonly used polyester support in the art.

The reference does not disclose the amount of blowing agent that would be present, if included. However, it would have been obvious to one of ordinary skill in the art to determine the amount for inclusion so that it performs its intended function, and by

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so doing, results in a medium with desired ink absorption characteristics so that the medium produces a relatively small dot for a given ink drop size (see col. 1, lines 45-51).

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-6, 10, 13 and 14 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Baker (EP 1,060,901). The reference discloses a support which may be polyethylene terephthalate [0014] and base layer of hydrophilic resin [0018-0019] which is inherently swellable based upon the resins from which it may be formed. The layer may be foamed with foaming agent or blowing agent [0022] and may have mordant and other well known additives and surfactants present [0026-0027 and 0039].

3. Claims 1, 3-7 and 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker (EP 1,060,901). It would have been obvious to one of ordinary skill in this art to include a cross-linking agent in the foamed layer to improve strength for the layer. It would also have been obvious to one of ordinary skill in the art to include a fluorosurfactant as the surfactant disclosed by the reference because these surfactants are conventional surfactants in the art. Finally, determination of amounts of surfactant, blowing agent, and other materials would have been obvious to one of ordinary skill in the art to yield a layer as taught by the reference.

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4. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 16, it is unclear what is meant by "differing from other porous inkjet recording media in which dye is held in pores located between particles." In what way is this medium different? Applicants need to recite the structural differences rather than the conclusion that their medium is different. It is unclear how and to what extent applicants' medium must differ from those of the prior art in order to meet the claim language.

5. Applicant's arguments filed May 25, 2006 have been fully considered but they are not persuasive. The rejections under 35 USC 112 from the previous office action have been overcome. With respect to claims 13-16, "consisting essentially of" is to be treated as comprising unless there is a clear indication in the specification and claims of what the basic and novel characteristics are. The examiner has considered the specification and claims and has not found them to clearly indicate that additional layer would have a materially affect of the basic and novel characteristics of the invention. Therefore, additional layers such as the top layer of Baker and the ink delivery layer of DeBoer et al. may be present.

With respect to DeBoer et al. what evidence is there that the polymer is insufficient to enable swelling. How much swelling is required for a layer to be called swellable? DeBoer et al. clearly disclose swellable polymers, i.e. polyvinyl alcohol, water absorbent starch, gelatin, etc. (see col. 3, line 48 to col. 4, line 5).

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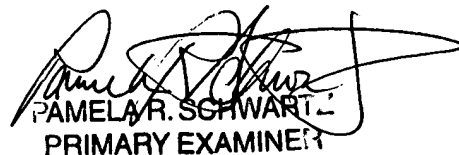
With respect to Baker et al, the base layer is ink receiving and is capable of absorbing dye from applied ink within the polymer. If the base layer receives ink solvent as in Baker, it is ink receiving. Even though this layer is primarily there to absorb solvent, to the extent that dye passes through to this layer, it is capable of swelling to absorb dye as claimed.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pamela Schwartz whose telephone number is (571) 272-1528.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRSchwartz
July 29, 2006


PAMELA R. SCHWARTZ
PRIMARY EXAMINER